REMARKS

Claim 1 has been amended herein. Claims 1-10 remain pending in the above-identified application.

Section 102 - Claims 1, 2, and 6

Applicants respectfully request reconsideration of the rejection of claims 1, 2, and 6 under 35 U.S.C. § 102(e) as being anticipated by U.S. publication number 2002/0030440 (Yamazaki). As amended, each of claims 1, 2, and 6 recites a display apparatus comprising, among other things, a plurality of lower electrodes patterned on a substrate in pixels, an auxiliary wiring disposed between adjacent lower electrodes, an insulating film formed on the substrate having pixel openings for exposing central portions of the lower electrodes and connection holes reaching the auxiliary wiring, an organic layer covering bottom portions of the pixel openings, and an upper electrode covering the organic layer and connected to the auxiliary wiring through one of the connection holes in each pixel.

Yamazaki discloses an electroluminescence device including a pixel electrode 711 and a connection wiring 715. Yamazaki does not show "an upper electrode covering the organic layer and connected to the auxiliary wiring through one of the connection holes **in each pixel.**" The Office Action asserts that the source/drain wirings 527, 528 (shown in Fig. 6 and section circuit 709 of Fig. 8b) and a connection wiring 715 (Fig. 8b) constitute the auxiliary wiring of the present invention. This assertion is flawed for many reasons. Yamazaki only shows a single connection between the electrode 711 and what the Office Action considers the auxiliary wiring (i.e., source/drain wirings 527, 528 and connection wiring 715). In other words, the portion of what the Office Action considers the auxiliary wiring that repeats (i.e., source/drain wirings 527, 528), if any, includes no connection to the electrode 711. Further, the portion of what the Office Action considers the auxiliary wiring that connects to the electrode 711 (i.e., connection wiring 715) does not repeat and is not

present in "each pixel". The Advisory Action dated March 14, 2006, asserts that "Fig. 8B is one pixel, of which a plurality make up a display device." However, Fig. 8B is a cross section of Fig. 8A and the entirety of that shown in 8B does not repeat. The reference discloses that there are a plurality of pixels containing an electric current control TFT 710 and a pixel electrode 711 and that banks 712 are formed on both ends of the pixel electrode. See Yamazaki, paragraphs [0123] and [0124]. The reference does not state or infer that the end of the device shown in Figs. 8A and 8B, including a flexible printed circuit 716, repeats. Instead, it is apparent the end of the device including the flexible printed circuit 716 does not repeat. The flexible printed circuit 716 is connected to what the Office Action considers the upper electrode (i.e., anode 714) through a single connection wiring 715. See Yamazaki, paragraph [0124], and Figs. 8A and 8B. The Examiner asserts that the connection wiring 715 is part of what is considered the presently claimed auxiliary wiring and is present between adjacent lower electrodes 711. See Office Action, page 2, lines 19-26, and Advisory Action, continuation sheet. Because the wiring 715 shown in Fig. 8B does not repeat, it is not present between each lower electrode nor each pixel. Thus, the reference fails to show an auxiliary wiring disposed between adjacent lower electrodes, as claimed.

The Advisory Action also asserts that "there must be a connection hole in each pixel to connect the auxiliary wiring to the upper electrode." However, the reference does not expressly or inherently show multiple connection holes reaching the auxiliary wiring nor an upper electrode connected to the auxiliary wiring through one of the connection holes in each pixel, as claimed. Yamazaki clearly states that the anode 714 is a common wiring for all pixels and contacts the flexible printed circuit 716 through a single connection wiring 715. See Yamazaki, paragraph [0124], and Figs. 8A and 8B. Thus, the reference fails to show an upper electrode connected to the auxiliary wiring through one of the connection holes in each pixel, as claimed.

Further, Yamazaki fails to show an organic layer as claimed. To show the organic layer, the Office Action (at page 3, lines 4-6) relies on Yamazaki's statement

that "there are no limitations placed on the light emitting layer provided that it is a low molecular type or polymer EL material." See page 3, lines 4-6, of Office Action, which cites paragraph 0118 of Yamazaki. As can be seen from this passage and the balance of Yamazaki, the reference fails to show an organic layer expressly or inherently as required by Section 102. Accordingly, the rejection is improper.

In addition, Yamazaki fails to show an auxiliary wiring disposed between adjacent lower electrodes and an insulating film formed on the substrate having connection holes reaching the auxiliary wiring. For example, while the claim recites that the insulation film has multiple holes reaching the auxiliary wiring, Yamazaki discloses only a single hole reaching what the Office Action considers the auxiliary wiring (i.e., the source/drain wirings 527, 528 and the connection wiring 715).

Because Yamazaki fails to show every feature of the claims, the rejection is improper. Accordingly, Applicants request the rejection be withdrawn.

Section 103 - Claims 3-5 and 7

Claim 3

Applicants respectfully request reconsideration of the rejection of claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki in view of U.S. Patent No. 6,366,016 (Sakaguchi) in further view of U.S. Patent No. 6,147,451 (Shibata). As an initial matter, the Office Action relies on the rejection of claim 2 for showing some of the features of claim 3. See Office Action, page 4, line 18. Because the rejection of claim 2 is improper as described above, the reliance on the rejection of claim 2 here renders this rejection improper. The shortcomings of Yamazaki with respect to claim 2 are not remedied by any combination of Yamazaki with Sakaguchi and Shibata.

Further, claim 3 recites that the upper electrode is connected to the auxiliary wiring through the connection holes between portions of the organic layer. Yamazaki discloses an electroluminescence device including a pixel electrode 711 and a connection wiring 715. Sakaguchi discloses an electroluminescent panel and process

for producing it and Shibata discloses an electrominiscent display device. Yamazaki, Sakaguchi, and Shibata, individually and in combination, fail to show or suggest an upper electrode connected to the auxiliary wiring through the connection holes **between portions of the organic layer**. The Office Action agrees that Yamazaki fails to disclose an upper electrode connected to auxiliary wiring through connection holes between portions of the organic layer. See Office Action, page 4, lines 21-23. Sakaguchi and Shibata also do not show or suggest an upper electrode connected to the auxiliary wiring through the connection holes between portions of the organic layer and the Office Action does not assert they do. The Office Action states that Shibata shows "that the upper electrode layer is connected to auxiliary wiring through an organic layer outside of the light emitting region." See Office Action, page 5, lines 3-6. However, the present claim does not recite what the Office Action states that Shibata shows. It is not clear what element in Shibata or Sakaguchi the Office Action considers the organic layer and how the references show an upper electrode **connected to the auxiliary wiring through the connection holes between portions of the organic layer.** If the Examiner wishes to maintain this rejection, Applicant requests the Examiner identify the element with particularity in the next Office Action.

Further, it would not have been obvious to combine the references as asserted because the Office Action refers to markedly distinct structures in Yamazaki and in Shibata as the same claim item. Specifically, although the Office Action considers "the portion of layer 111 that is connected to item 103" of Shibata as the auxiliary wiring (see Office Action, page 5, lines 4-6), it also considers the source/drain wires 527, 528 and a connection wiring 715 of Yamazaki as the auxiliary wiring (see Office Action, page 2, lines 18-24). One skilled in the art in contemplating ways to improve the device of Yamazaki by altering the source/drain wirings 527, 528 and connection wiring 715, would not have been motivated to consider a "portion of layer 111 that is connected to item 103" of Shibata as a substitute for the source/drain wirings 527, 528 and the connection wiring 715 of Yamazaki or as inspiration for changing the source/drain

wirings 527, 528 and the connection wiring 715 of Yamazaki to create the present invention. The MPEP requires the Examiner to carefully guard against the natural tendency to resort to hindsight. See MPEP 2142.

Because the references fail, individually and in combination, to show or suggest every feature of the claims, the rejection is improper. Accordingly, Applicants request the rejection be withdrawn.

Claims 4, 5, and 7

Applicants respectfully request reconsideration of the rejection of claims 4, 5, and 7 under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki in view of Sakaguchi in further view of Shibata and U.S. Patent No. 6,195,034 (Tsuno). As an initial matter, the Office Action relies on the rejection of claim 3 for showing some of the features of claims 4, 5, and 7. See Office Action, page 5, lines 19 and 20. Because the rejection of claim 3 here is improper as described above, the reliance on the rejection of claim 3 renders this rejection improper. The shortcomings of Yamazaki, Sakaguchi, and Shibata with respect to claim 3 are not remedied by any combination of them with Tsuno.

Further, regarding claim 4, the references, individually and in any combination, fail to show or suggest a display apparatus including lower electrodes having a three-layer structure. Yamazaki discloses an electroluminescent device including a pixel electrode 711 and a connection wiring 715. Sakaguchi and Shibata disclose electroluminescent devices. Tsuno discloses a panel that absorbs radio waves on the exterior of large buildings such as skyscrapers. The Office Action agrees that Yamazaki, Sakaguchi, and Shibata fail to disclose lower electrodes having a three-layer structure. See Office Action, page 5, line 20, to page 6, line 2.

Tsuno discloses a skyscraper covering including a three-layer structure. One skilled in the art would not have been motivated to use structures from Tsuno in a device created by combining Yamazaki, Sakaguchi, and Shibata because Tsuno is in a non-analogous art. The present art of electroluminescence or electronic image devices

is different than the art of devices designed to absorb radio waves on large buildings. The MPEP states that "to rely on a reference under 35 U.S.C. § 103, it must be an analogous prior art" or would have logically commended itself to the inventor's attention in considering his/her problem. See MPEP 2141.01(a). One skilled in the electronic image device art, considering a way to improve an image device created by somehow combining Yamazaki, Sakaguchi, and Shibata, would not have been motivated to replace an electrode component of the image device with a three-layer structure used to absorb radio waves on the exterior of skyscrapers. In other words, the radio wave absorbing technology used on skyscrapers would not have logically commended itself to the attention of an inventor in the electroluminescence or electronic imaging arts. Again, the Examiner must avoid the tendency to resort to hindsight. MPEP 2142.

Further regarding claim 5, the references, individually and in combination, fail to show or suggest a display apparatus including lower electrodes having a three-layer structure including a reflective metallic material layer sandwiched between conductive oxide material layers. The Office Action agrees that Yamazaki, Sakaguchi, and Shibata fail to disclose lower electrodes having a three-layer structure including a reflective metallic material layer sandwiched between conductive oxide material layers. See Office Action, page 5, line 20, to page 6, line 2.

Tsuno discloses a skyscraper covering including a three-layer structure including ITO (indium tin oxide), Ag (silver), and ITO. One skilled in the art would not have been motivated to replace an electrode of an electronic imaging device created by combining Yamazaki, Sakaguchi, and Shibata with a structure of Tsuno because Tsuno is in an unrelated art. Specifically, the art of electroluminescence or electronic image devices is different from the art of devices designed to absorb radio waves on large buildings. The MPEP states that "to rely on a reference under 35 U.S.C. § 103, it must be an analogous prior art" or would have logically commended itself to the inventor's attention in considering his/her problem. See MPEP 2141.01(a). One skilled in the electroluminescence or electronic image device art considering a way to improve an

image device created by combining Yamazaki, Sakaguchi, and Shibata would not have been motivated to replace the electrode of an electronic image device with a three-layer structure used to absorb radio waves on the exterior of skyscrapers. In other words, the radio wave absorbing technology used on skyscrapers would not have logically commended itself to the attention of an inventor in the electroluminescence or electronic imaging arts.

Further regarding claims 4, 5, and 7, the MPEP states that "[in] determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." See MPEP 2141.02(I). Thus, although the Examiner may believe that each of the individual alterations to Yamazaki and the other references was separately obvious, the issue is, rather, whether one skilled in the art would have been motivated to combine the various four references to create the whole present invention. For at least the above stated reasons, it would not have been obvious to combine various elements of all of the cited references to create the claimed invention.

Because the references fail, individually and in combination, to show or suggest every feature of the claims, the rejection is improper. Accordingly, Applicants request the rejection be withdrawn.

Conclusion

As it is believed that the application is in condition for allowance, a favorable

action and a Notice of Allowance are respectfully requested.

Respectfully submitted,

Date: 4/5/6

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